What is already known on this topic

Results from studies in monkeys suggest that high daily doses of caffeine in pregnancy increase the risk of stillbirth, but evidence from studies in humans has been lacking

What this study adds

Pregnant women who drank eight or more cups of coffee a day had more than twice the risk of stillbirth compared with women who did not drink coffee during pregnancy

the timing of the data collection, our information could not be biased by the women's knowledge about the outcome of pregnancy. Potential misclassification is likely to be non-differential, and our results may thus underestimate the true association between coffee drinking and stillbirth. Due to a higher intake of coffee and a faster metabolism among smokers[15 16] we hypothesised that the fetotoxic effect of caffeine could depend on smoking habits during pregnancy. However, the risk of stillbirth associated with coffee was similar in smokers and non-smokers.

There did not seem to be one single cause that could explain the increased risk of stillbirth among women with a high intake of coffee (see bmj.com).

Information on coffee intake during pregnancy was missing in a quarter of the population. Women with missing information had a different risk profile than women with valid information. However, we have no reason to believe that the association between coffee and stillbirth among women with non-valid information would be different from the one we found.

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Longitudinal study of childhood wheezy bronchitis and asthma: outcome at age 42

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Longitudinal studies have reported that asthma in childhood has a good prognosis. However, most of these studies have not taken into account the severity of childhood symptoms.[1] The Melbourne Epidemiological Study of Childhood Asthma recruited children at age 7 years and followed them up through adolescence to adulthood.[2–5] This report describes outcome at age 42 years in relation to symptoms in childhood.

Participants, methods, and results

In 1964, 401 children (295 with asthma and 106 controls) were randomly selected from a total of 30 000 7 year olds living in metropolitan Melbourne. A further 83 children with severe asthma were included from the same cohort in 1967, at age 10.[2 3] Original data were available for 479 participants.

At recruitment, 105 children were classified as controls (children who had never wheezed); 74 had mild wheezy bronchitis (<5 episodes of wheezing associated with respiratory tract infection); 104 had wheezy bronchitis (≥5 episodes of wheezing associated with respiratory tract infection); 113 had asthma (wheezing unassociated with respiratory tract infection); and 83 had severe asthma (onset of asthma symptoms before 3 years of age, persistent symptoms at age of 10, and barrel chest deformity or ratio of forced expiratory volume in one second to forced vital capacity ≤50%).

At each review from the age of 21, participants were classified as follows: no recent asthma (no wheeze in past three years); infrequent asthma (wheezing in past three years but none in past three months); frequent asthma (wheezing in past three months, but less than once a week); or persistent asthma (wheezing in past three months, more than once a week).

Distribution of asthma and lung function in participants aged 42 according to severity of asthma at age 7 or 10

	No (%) at age 42					Lung function at age 42		
Symptoms age 7	No recent asthma (n=199)	Infrequent asthma (n=58)	Frequent asthma (n=76)	Persistent asthma (n=70)	Total (n=403)	No measured (n=267)	FEV_1/FVC (95% CI)	Mean % of predicted FEV_1 (95% CI)
Mild wheezy bronchitis	40 (66)	12 (20)	9 (15)	0	61	40	80 (79 to 82)	109 (103 to 114)
Wheezy bronchitis	50 (57)	13 (15)	16 (18)	9 (10)	88	62	79 (76 to 81)	102 (98 to 106)
Asthma	28 (29)	19 (19)	27 (28)	24 (24)	98	70	75* (73 to 77)	95* (92 to 99)
Severe asthma	8 (11)	9 (13)	20 (29)	33 (47)	70	42	70* (67 to 74)	85* (78 to 91)
Control	73 (85)	5 (6)	4 (5)	4 (5)	86	53	80 (78 to 82)	104 (101 to 108)

FEV_1=forced expiratory volume in 1 second; FVC=forced vital capacity.
*P<0.001 compared with controls.

Fifteen of the original cohort had died at follow up, one from asthma. Of the remaining 464, 403 participated in the current review, giving a continuing participation rate of 87%. In all, 267 participants attended the laboratory for measurement of lung function. We calculated mean values of lung function using standard two sample *t* tests and confidence intervals of the mean by standard methods.

The table shows the clinical expression of asthma at age 42 according to severity of disease at recruitment. The distribution of severity at age 42 has not changed from that at age 35.[5] The proportion of cases with no recent asthma has increased steadily from 20% at age 14 years to 40% (126/317) at age 42.

Lung function was similar to that of controls in participants who had had wheezy bronchitis in childhood (table). Participants who had had asthma aged 7 had reduced lung function at age 42.

Comment

Our study shows that the pattern of asthma during childhood predicts outcome. Most children with persistent asthma had continuing symptoms into adult life and reduced lung function. However, children who had intermittent symptoms associated with respiratory tract infections generally had complete resolution of symptoms in adult life. The small number of participants who still had mild, intermittent symptoms at age 42 had normal lung function. This good outcome was achieved despite the fact that anti-inflammatory treatments were not available for most of their childhood.

Contributors: CFR, AO, and JW initiated the project and, together with EH, AL, MR and LW, developed the protocol. EH, AL, MR, and LW were responsible for recruitment, data collection, and data analysis. JBC was the statistician. The manuscript was jointly written and reviewed by all of the authors. CFR is the guarantor.

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Spontaneous loss of early pregnancy and risk of ischaemic heart disease in later life: retrospective cohort study

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We recently showed that complications in late pregnancy are associated with an increased risk of maternal ischaemic heart disease (IHD) in later life.[1] We hypothesised that this may reflect common determinants, such as thrombophilic genetic defects and anticardiolipin antibodies. Spontaneous losses of pregnancy are also associated with inherited and acquired thrombophilias in the mother.[2] We examined whether spontaneous losses of early pregnancy are associated with maternal risk of IHD.

Participants, methods, and results

We used routine national maternity data (SMR2) to identify all 129 290 eligible women who delivered their first liveborn infant in Scotland during 1981-5. The exclusion and inclusion criteria, definitions, and demographic characteristics were as previously described.[1] We used national death (GRO) and discharge (SMR1) data to determine the risk of death or hospital admission due to IHD during 1981-99. The cumulative probabilities of survival free from IHD events were assessed with Cox's proportional hazards models with age as the time scale (Stata version 7.0, StataCorp, College Station, TX,USA).

A history of any spontaneous loss of early pregnancy before the first live birth was associated with an increased risk of IHD (table). The association was independent of maternal age at the time of first birth, height, socioeconomic deprivation, essential hypertension, and complications during the first pregnancy. The magnitude of the risk increased with the number of previous losses. By contrast, there was no association between therapeutic abortion and subsequent risk of IHD (adjusted hazard ratio 0.93, 95% confidence interval 0.59 to 1.46). Only 0.1% (162) of women had had a hernia repair, and there was no significant association

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